FACILITIES SUPPORT SERVICES AND SUSTAINABILITY STATUS REPORT

DECEMBER 4, 2015

KCTCS
HIGHER EDUCATION BEGINS HERE
Facilities Support Services and Sustainability Status Report

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Facilities Management and Sustainability Status Report

Introduction

The Facilities Management and Sustainability Status Report is provided as a vehicle to update the KCTCS Board of Regents on current capital construction and major renovation projects as well as other initiatives the KCTCS Office of Facilities Management oversees. The report is organized in the following sections:

- **Capital Projects**
  In this section, a brief summary of current capital construction and major renovation projects is provided along with an overview of the capital construction process that each project must follow. The report also includes a description of the major cost elements common to most construction projects.

- **Facilities Support Services**
  Information about the KCTCS Crisis Management initiative is provided behind the Facilities Support Services Tab. KCTCS Crisis Management mission is to develop a disaster-resistance community and technical college system.

- **Sustainability Initiatives**
  Consistent with the KCTCS Vision to be the nation’s premier community and technical college system, KCTCS is becoming a leader in practices, educational and workforce training opportunities, and community leadership related to sustainable development. The KCTCS sustainability definition and focus along highlights of KCTCS Green+ Sustainability Initiatives are provided in this section.

- **Facilities Utilization**
  In order to ensure KCTCS meets the challenges of rising enrollment during a period of limited construction, it must ensure that all space available to KCTCS has maximum utilization. The purpose of the Facilities Utilization Section is to measure how productively KCTCS colleges are using their instructional space. In particular, this update contains information that demonstrates how well the institutions are using their classrooms and class laboratories.
In the 2014-16 biennium, KCTCS has one state-funded capital construction project: a $24 million, 80,000 gross square foot Advanced Manufacturing Facility at Bluegrass Community and Technical College’s Georgetown location.

During the 2014 Regular Session of the Kentucky General Assembly, the KCTCS BuildSmart Initiative was approved, with the goal of building a skilled, educated workforce. The KCTCS BuildSmart Initiative authorizes funding for the top capital project at each KCTCS college, as requested by the president of each college. The total scope of the KCTCS BuildSmart public-private partnership initiative is $194 million for the 16 capital projects. Agency bonds will be issued to pay for 75 percent of the total project scope (i.e., $145.5 million in agency bonds). The remaining 25 percent ($48.5 million) will be matched from private and other funds raised by the KCTCS colleges.

A listing of the state funded and BuildSmart funded projects is provided in Capital Projects Summary table on the following page. The table provides general information about each projects, including location, biennium the project was funded, total scope, architects, project status, bid date, and estimated completion date. More detailed information for each project follows on pages 7 – 24. The general process for capital construction projects and the cost elements for capital projects is on pages 5 and 6, respectively.
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<td>Big Sandy CTC</td>
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$ 194,000,000  

$ 218,000,000
Capital Construction Process

The Kentucky Community and Technical College System's capital projects are administered through the Finance and Administration Cabinet's Department for Facilities Management. Therefore, all projects follow the policies and procedures established by the Finance Cabinet in accordance with Kentucky Revised Statutes. The construction process consists of a series of phases, each of which builds on what was created in the preceding phase. The result of this phased process is a well-thought-out and well-designed project that will meet the needs of the user and will be in budget. The phases of each project are:

1. **Site Selection:** Site selection can be made prior to program development or simultaneously with the programming exercise. Site selection is a critical exercise, one that can greatly impact the design of the facility and the construction budget. Factors influencing a site selection include:
   - Number of acres required for new facility
   - Acreage needed for expansion
   - Purchase price
   - Availability of utilities
   - Visibility
   - Accessibility to student base

2. **Schematic Design/Programming (Phase A):** The first step is program development. Working with college representatives the facility project managers define space needs by program and determine room data requirements. Once the program is developed and a site is selected, the consultant develops a schematic design of the facility based on the site characteristics and the program. This phase requires the most involvement by the college. The college will participate in projects meetings and walk-throughs and provide additional information as needed. The Schematic Design phase generally takes from two to four months to complete, and includes the following information:
   - Site development concepts
   - Flow diagrams and space relationships
   - Single-line drawings of floor plans and elevations
   - A project budget and preliminary construction cost estimate
   - Outline specifications for the structure, materials and systems

3. **Design Development (Phase B):** In this phase, the consultant builds on the work completed in Phase A and begins the detailed design work and associated research. Phase B generally takes from three to six months to complete and includes:
   - More detailed drawings and specifications
   - Fully developed exterior elevations
   - Space refinements
   - Building details
   - More detailed construction cost estimate

4. **Construction Documents (Phase C):** In this phase, the consultant team develops the final plans and specifications used to bid and construct the new building. Typically, this phase will take three to four months to complete and includes:
   - Construction details
   - Complete specifications
   - Detailed plans
   - Room finish schedules
   - Final construction estimate

5. **Construction (Phase D):** Depending upon the size of the project, the construction will take from 12 to 24 months to complete. Monthly progress meetings are held during the construction phase and, generally, there is a resident construction inspector on the construction site who is hired by the consultant to oversee the project for KCTCS and the Finance and Administration Cabinet.
Capital Project Cost Elements

Each capital project is comprised of a number of cost elements which, when combined, establish the total scope of the construction project. Those elements are:

1. **Design and Administrative Costs:** Includes the consultant fees, surveying, testing, and inspection costs. It also includes duplicating costs for plans and specifications and the resident inspector's salary. Most of these costs are determined using fee schedules and formulas developed by the Finance and Administration Cabinet.

2. **Construction Costs:** Includes building construction and site-development costs. Often these two costs are combined into a single cost per square foot, which is multiplied by the gross square footage of the project to derive the estimated construction cost. The cost per square foot is based on experience with similar projects and anticipated cost increases.

3. **Equipment and Furnishings:** Includes all equipment and furnishings needed to make the building functional upon completion. It usually is determined by developing equipment lists and associated costs for the various program areas in the new facility and totaling the lists.

4. **Land / Right-of-Way:** Includes the cost of acquiring a suitable site, access to a suitable site, and utility easements across adjacent property. It also includes all legal and administrative costs associated with these acquisitions.

5. **Information Technology Infrastructure:** Includes the costs associated with creating all communications pathways to and within the new facility. All voice, data, and video communications infrastructure are included in this cost.
Capital Project Descriptive Summary

**PROJECT:** Construct Advanced Manufacturing Facility

**LOCATION:** Bluegrass CTC Georgetown Campus, Georgetown

**ARCHITECT:** Omni Architects

**GROSS SQUARE FOOTAGE:** 80,000

**NET SQUARE FOOTAGE:** 58,000

**SITE SIZE:** 20 Acres

**BUDGET INFORMATION:**

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<td><strong>Total Project Cost</strong></td>
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**PROJECTED PROJECT SCHEDULE:**

- Schematic Design (Phase A) Completion: July 2014
- Design Development (Phase B) Completion: October 2014
- Construction Documents (Phase C) Completion: December 2014
- Construction Start Date: April 2015
- Construction Complete: October 2016

**PROGRAMS AND SERVICES:**

Multiple certificate and degree options, including traditional academic associate degree programs, will be offered at the center, providing needed support to Kentucky’s manufacturing sector. The center provides opportunity for additional training capacity in automotive manufacturing technology and to supplement the high demand programs at the BCTC Leestown Campus in Lexington. BCTC will partner with Scott County Schools to offer education in multiple career pathways that revolve around manufacturing. Anticipated programming at the center includes Automation Systems, Assembly Systems, Manufacturing Systems/Lean Manufacturing, and Industrial and Manufacturing Engineering Technology.

**PROJECT STATUS:**

Bids were opened on March 19, 2015. Low bid of $15.982 million was submitted by Messer Construction of Louisville. A construction contract has been issued and construction is underway. A groundbreaking ceremony was held on April 13, 2015.
**PROJECT:** Renovate Main Building, College Drive Campus

**LOCATION:** Ashland CTC
College Drive Campus, Ashland

**ARCHITECT:** alt32 Architecture

**GROSS SQUARE FOOTAGE:** 150,000

**NET SQUARE FOOTAGE:** 100,000

**BUDGET INFORMATION:**
- Land Acquisition: 0
- Site Survey/Prep: 0
- Project Design & Other Administrative Expenses: 800,000
- Construction Cost Estimate: 7,821,400
- Equipment & Furniture Estimate: 0
- Project Contingencies: 1,378,600

**Total Project Cost**

$10,000,000

**PROJECTED PROJECT SCHEDULE:**
- Schematic Design (Phase A) Completion: March 2015
- Design Development (Phase B) Completion: August 2015
- Construction Documents (Phase C) Completion: November 2015
- Construction Start Date: February 2016
- Construction Complete: September 2017

**PROGRAMS AND SERVICES:**
The Ashland Community and Technical College, Main Building was originally constructed in 1967 and consists of approximately 150,000 gross square feet. This facility is primarily used for education. The square footage breaks down as follows: Classroom Space – 13,500 square feet, Laboratory Space – 15,500 square feet, Offices/Conference – 27,000 square feet, Special Use Space – 3,000 square feet, General Use – 16,000 square feet, Support Facilities – 5,000 square feet, and Un-assignable Space – 53,000 square feet. This project will replace existing infrastructure in the building.

**PROJECT STATUS:**
Project is in Phase C design.
BuildSmart Project Descriptive Summary

**PROJECT:** Design and Planning, Expansion of Pikeville Campus

**LOCATION:** Big Sandy CTC
Pikeville Campus, Pikeville

**ARCHITECT:** Ross Tarrant

**GROSS SQUARE FOOTAGE:** 60,000

**NET SQUARE FOOTAGE:** TBD

**BUDGET INFORMATION:**
- Land Acquisition: 0
- Site Survey/Prep: 0
- Project Design & Other Administrative Expenses: 2,000,000
- Construction Cost Estimate: 0
- Equipment & Furniture Estimate: 0
- Project Contingencies: 0

**Total Project Cost** $2,000,000

**PROJECTED PROJECT SCHEDULE:**
- Schematic Design (Phase A) Completion: January 2016
- Design Development (Phase B) Completion: April 2016
- Construction Documents (Phase C) Completion: N/A
- Construction Start Date: N/A
- Construction Complete: N/A

**PROGRAMS AND SERVICES:**
This project will be planning and designing the expansion of the Pikeville Campus. The design will be for an approximately 60,000 gsf facility. This facility will provide additional growth opportunity for allied health and technical programs identified as needed in the Big Sandy Community and Technical College service area. Programs may include the need for classrooms, computer labs, technology labs, auditorium, bookstore and technical related program areas.

**PROJECT STATUS:**
The project is currently in Phase A design. Design will be complete through Phase B. Funding and authorization is being requested in the 2016 budget session for construction dollars with a total project budget to equal $30,000,000.
**BuildSmart Project Descriptive Summary**

**PROJECT:** Newtown Campus Expansion

**LOCATION:** Bluegrass CTC  
Newtown Campus, Lexington

**ARCHITECT:** Omni Architects

**GROSS SQUARE FOOTAGE:** 64,000

**NET SQUARE FOOTAGE:** 40,000

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**Total Project Cost** $24,000,000

**PROJECTED PROJECT SCHEDULE:**

- Schematic Design (Phase A) Completion: April 2015
- Design Development (Phase B) Completion: September 2015
- Construction Documents (Phase C) Completion: February 2016
- Construction Start Date: March 2016
- Construction Complete: September 2017

**PROGRAMS AND SERVICES:**

This project is to complete Phase II of the master plan by constructing an approximate additional 64,000 square foot facility on the Newtown Campus of Bluegrass Community and Technical College that will house science classrooms, labs, faculty/staff offices, administrative offices and other student support spaces. This facility is needed in order to begin transferring programs from the Cooper Campus on University of Kentucky’s campus to the new Newtown Campus now being developed on the site of the old Eastern State Hospital. Additional site development will be required for parking, streets and walks.

**PROJECT STATUS:**

This project is currently in Phase C development.
BuildSmart Project Descriptive Summary

**PROJECT:** Renovate Owen Classroom Building

**LOCATION:** Elizabethtown CTC
Main Campus, Elizabethtown

**ARCHITECT:** Godsey Associates

**GROSS SQUARE FOOTAGE:** 35,000

**NET SQUARE FOOTAGE:** 23,500

**BUDGET INFORMATION:**
- Land Acquisition: 0
- Site Survey/Prep: 0
- Project Design & Other Administrative Expenses: 100,000
- Construction Cost Estimate: 810,000
- Equipment & Furniture Estimate: 0
- Project Contingencies: 90,000

**Total Project Cost** $1,000,000

**PROJECTED PROJECT SCHEDULE:**
- Schematic Design (Phase A) Completion: October 2015
- Design Development (Phase B) Completion: November 2015
- Construction Documents (Phase C) Completion: December 2015
- Construction Start Date: February 2016
- Construction Complete: September 2016

**PROGRAMS AND SERVICES:**
Renovation will include floor covering and painting of the building. This 35,000 sq. ft. building is the original building built in 1964 and still has concrete flooring in all of the classrooms and hallways.

**PROJECT STATUS:**
This project is in Phase A design.
**BuildSmart Project Descriptive Summary**

**PROJECT:** Construct Urban Campus

**LOCATION:** Gateway CTC
   Urban Campus, Covington

**ARCHITECT:** EOP Architects

**GROSS SQUARE FOOTAGE:** N/A

**NET SQUARE FOOTAGE:** N/A

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**Total Project Cost** $15,000,000

**PROJECTED PROJECT SCHEDULE***:

- Schematic Design (Phase A) Completion: November 2015
- Design Development (Phase B) Completion: December 2015
- Construction Documents (Phase C) Completion: February 2016
- Construction Start Date: March 2016
- Construction Complete: August 2018

*The Urban Campus project consisted of the renovation of two buildings. The renovations will be two different construction contracts. The dates indicate the start of the first renovation design and the construction completion of the second renovation contract.

**PROGRAMS AND SERVICES:**
The overall project encompasses land acquisition, facilities design, construction and renovation. Programs currently located at the existing campus on Amsterdam Road in Covington and the Park Hills Center will be evaluated to determine the appropriateness and feasibility of moving to the Urban Core. It is envisioned that the programs and services initially planned for the new Urban Campus will include the following:

- Transfer programs to senior institutions
- Business, Information Technology, Graphics Arts
- Criminal Justice, Human Services, Cosmetology
- Pre-engineering/Mechatronics, energy technology
- Pre-allied Health, pre-nursing, certified Nurse Aid training
- Full range of adult education and student services
- Dual credit programs for urban school districts
- Specialized workforce training for urban businesses
- Automotive

**PROJECT STATUS:**
Currently in Phase A design.
PROJECT: Design & Planning - Construct Community Intergenerational Center

LOCATION: Hazard CTC
Lees Campus, Jackson

ARCHITECT: Myers Jolly

GROSS SQUARE FOOTAGE: 28,500

NET SQUARE FOOTAGE: TBD

BUDGET INFORMATION:
- Land Acquisition: 0
- Site Survey/Prep: 0
- Project Design & Other Administrative Expenses: 2,000,000
- Construction Cost Estimate: 0
- Equipment & Furniture Estimate: 0
- Project Contingencies: 0

Total Project Cost: $2,000,000

PROJECTED PROJECT SCHEDULE:
- Schematic Design (Phase A) Completion: December 2014
- Design Development (Phase B) Completion: April 2015
- Construction Documents (Phase C) Completion: N/A
- Construction Start Date: N/A
- Construction Complete: N/A

PROGRAMS AND SERVICES:
The Intergenerational Center is a proposed 28,500 gsf building on the Lees Campus of Hazard Community and Technical College. The center will include classrooms, offices, conference room, one stop student services area, student lounge, bookstore, and a community / large multipurpose room center. Classrooms, with space for use by local school districts for dual credit course offerings. There will be space for ARC and smart classrooms. This new structure would greatly improve accessibility and the instructional and student support programs for the students at the campus.

PROJECT STATUS:
This project is finished with Phase B design. Funding and authorization is being requested in the 2016 budget session for construction dollars with a total project budget to equal $10,700,000.
BuildSmart Project Descriptive Summary

**PROJECT:** Renovate Campus Wide Facilities

**LOCATION:** Henderson CC  
Main Campus, Henderson

**ARCHITECT:** Murphy Graves Trimble

**GROSS SQUARE FOOTAGE:** N/A

**NET SQUARE FOOTAGE:** N/A

**BUDGET INFORMATION:**

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**PROJECTED PROJECT SCHEDULE:**

- Schematic Design (Phase A) Completion: July 2015
- Design Development (Phase B) Completion: September 2015
- Construction Documents (Phase C) Completion: December 2015
- Construction Start Date: March 2016
- Construction Complete: August 2017

**PROGRAMS AND SERVICES:**

This project includes the renovations in five buildings on the Henderson Campus. The buildings are in need of upgrades and renovations to bring them into the 21st century. Renovations will include HVAC upgrades in the Administration Building, new elevators in two buildings, roof repairs and address ADA issues throughout the buildings.

**PROJECT STATUS:**

Currently in Phase C design.
BuildSmart Project Descriptive Summary

PROJECT: Construct Agriculture Health & Career Technology Center, Phase I

LOCATION: Hopkinsville CC
Main Campus, Hopkinsville

ARCHITECT: Hafer Associates

GROSS SQUARE FOOTAGE: 51,000

NET SQUARE FOOTAGE: 35,000

BUDGET INFORMATION:

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PROJECTED PROJECT SCHEDULE:

- Schematic Design (Phase A) Completion: October 2015
- Design Development (Phase B) Completion: December 2015
- Construction Documents (Phase C) Completion: April 2016
- Construction Start Date: May 2016
- Construction Complete: December 2017

PROGRAMS AND SERVICES:
This project will provide additional growth opportunity for new allied health programs identified as needed in the HCC service area. New programs will include Clinical Lab Technician, Radiology/Sonography Technician and Physical Therapy Assistant. This facility will also include classrooms, computer labs, technology labs and flexible career related teaching areas for programs such as agriculture programs.

PROJECT STATUS:
This project is currently in Phase B design.
PROJECT: Construct Carrollton Campus, Phase I

LOCATION: Jefferson CTC
            Carrollton Campus, Carrollton

ARCHITECT: EOP Architects

GROSS SQUARE FOOTAGE: 48,100

NET SQUARE FOOTAGE: 33,600

SITE SIZE: 30 Acres

BUDGET INFORMATION:

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PROJECTED PROJECT SCHEDULE:

- Schematic Design (Phase A) Completion: March 2015
- Design Development (Phase B) Completion: June 2015
- Construction Documents (Phase C) Completion: November 2015
- Construction Start Date: January 2016
- Construction Complete: June 2017

PROGRAMS AND SERVICES:
The new campus will expand on the community and technical college programming currently offered at a leased facility in downtown Carrollton, provide testing and assessment services, and will provide technical training and business and industry training facilities to expand postsecondary education opportunities in the region.

PROJECT STATUS:
The project is currently in Phase C design.
**Project Descriptive Summary**

**Project:** Construct Postsecondary Education Center

**Location:** Madisonville CC
Main Campus, Madisonville

**Architect:** Myers Jolly Architects

**Gross Square Footage:** 60,000

**Net Square Footage:** 39,000

**Budget Information:**

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**Projected Project Schedule:**

- Schematic Design (Phase A) Completion: April 2015
- Design Development (Phase B) Completion: June 2015
- Construction Documents (Phase C) Completion: November 2015
- Construction Start Date: February 2016
- Construction Complete: August 2017

**Programs and Services:**

This project will construct an approximately 60,000 gsf facility on the main campus of Madisonville Community College. The Center will provide classroom and office space for use by Murray State University and Madisonville Community College. The Center will allow the citizens of Madisonville and surrounding areas the opportunity to pursue a bachelors or graduate degree in an increased number of programs without leaving the area and enable students to pursue the initial two years of college through the Madisonville Community College and then transfer to Murray State University to complete their college education all on the same campus.

**Project Status:**

This project is currently in Phase C design.
**BuildSmart Project Descriptive Summary**

**PROJECT:** Construct MCTC/MoSU Postsecondary Center of Excellence, Phase I

**LOCATION:** Maysville CTC Rowan Campus, Morehead

**ARCHITECT:** Omni Architects

**GROSS SQUARE FOOTAGE:** 87,100

**NET SQUARE FOOTAGE:** 56,800

**SITE SIZE:** 41.11 acres

**BUDGET INFORMATION:**

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**PROJECTED PROJECT SCHEDULE:**

- Schematic Design (Phase A) Completion: June 2015
- Design Development (Phase B) Completion: October 2015
- Construction Documents (Phase C) Completion: April 2016
- Construction Start Date: June 2016
- Construction Complete: November 2017

**PROGRAMS AND SERVICES:**

This project is to construct Phase I of a new campus replacing Mayville’s Rowan Campus located in Morehead Kentucky. The first phase of the new campus will be an 87,100 gsf structure which will house a Postsecondary Center of Excellence in Advanced Manufacturing program to be developed along with Morehead State University (MSU) to serve the region. KCTCS, MoSU and MCTC realize that the full development of the campus will require phasing over several biennia. The existing Rowan Campus was built in 1984 and has approximately 63,000 gsf of floor area which the college has outgrown and there is no room for expansion. The new campus will provide much needed space to expand their existing program offerings and also provide space to add new programs to meet the area’s industry needs. The new facility will also support students and staff with onsite food service and student lounge area, bookstore services, science labs, Workforce Development and provide a much needed updated IT infrastructure.

**PROJECT STATUS:**

This project is currently in Phase C design.
BuildSmart Project Descriptive Summary

PROJECT: Construct Advanced Technology Center Phase II

LOCATION: Owensboro CTC
Main Campus, Owensboro

ARCHITECT: Ross Tarrant

GROSS SQUARE FOOTAGE: 51,800

NET SQUARE FOOTAGE: 35,400

BUDGET INFORMATION:

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Total Project Cost $12,000,000

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<tr>
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PROGRAMS AND SERVICES:

This project will construct a 51,800 gsf second phase to the Owensboro Advanced Technology Center. Phase I was completed in 2007. Phase II will serve as an integrated lab and teaching facility for the HVAC, Building Controls, Electrical and Welding programs. This phase will allow for relocation of programs to the Main Campus and open valuable space at the Downtown and Southeastern Campus locations for program expansion.

PROJECT STATUS:

This project is currently in Phase C design.
BuildSmart Project Descriptive Summary

**PROJECT:** Planning and Design Arts and Humanities Building

**LOCATION:** Somerset CC
North Campus, Somerset

**ARCHITECT:** Clotfelter-Samokar

**GROSS SQUARE FOOTAGE:** 74,000

**NET SQUARE FOOTAGE:** TBD

**SITE SIZE:** TBD

**BUDGET INFORMATION:**

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**Total Project Cost** $2,000,000

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**PROGRAMS AND SERVICES:**

This project provides for the construction of a 74,000 gsf Arts and Humanities Building. This project will house the Art, Music, Theater and Culinary Arts programs. This facility will include a full Performing Arts Theater / Auditorium, Workshops, Seminar and Conference Space, an Art Gallery, Public Exhibition area, some classrooms, faculty offices and an administrative support area. It would also house the Culinary Arts program, including kitchen and dining area, perhaps with a separate entrance. This project would include parking, vehicular access and site development.

**PROJECT STATUS:**

This project is in Phase B design. Programming meetings have occurred with the college and instructors on space and program requirements for the building. Subsurface investigation will be undertaken in order to avoid problems later in the design process. Funding and authorization is being requested in the 2016 budget session for construction dollars with a total project budget to equal $27,300,000.
BuildSmart Project Descriptive Summary

**PROJECT:** Construct Instructional Complex

**LOCATION:** Southcentral Kentucky CTC
Main Campus, Bowling Green

**ARCHITECT:** Stengel Hill Architecture

**GROSS SQUARE FOOTAGE:** 76,000

**NET SQUARE FOOTAGE:** 45,100

**BUDGET INFORMATION:**

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<tr>
<td>Construction Complete</td>
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</table>

**PROGRAMS AND SERVICES:**

This project will construct a 76,000 gsf facility to house the Instructional Classroom Complex. The new structure(s) will support various formal and informal learning and student engagement environments. The formal instructional areas will consist of both flexible multi-purpose classrooms and science labs. The informal instructional areas will create more progressive open and collaborative space environments that include library capacity, open computing space, and student tutoring; these types of spaces are often referred to as learning commons.

Part of the intent with the additional space is to create a focal point for the main campus and a center for community engagement. As part of the main focal point, it would be beneficial for the space to also contain the College’s Welcome Center. The Welcome Center would serve as the hub for student recruiting and community engagement.

**PROJECT STATUS:**
The project is currently in Phase C design.
PROJECT: Construct Educational Alliance Center

LOCATION: Southeast KY CTC
Middlesboro Campus, Middlesboro

ARCHITECT: Clotfelter – Samokar

GROSS SQUARE FOOTAGE: 34,700

NET SQUARE FOOTAGE: 19,600

BUDGET INFORMATION:
- Land Acquisition: 0
- Site Survey/Prep: 20,000
- Project Design & Other Administrative Expenses: 785,000
- Construction Cost Estimate: 7,540,000
- Equipment & Furniture Estimate: 805,000
- Project Contingencies: 850,000

Total Project Cost: $10,000,000

PROJECTED PROJECT SCHEDULE:
- Schematic Design (Phase A) Completion: April 2015
- Design Development (Phase B) Completion: July 2015
- Construction Documents (Phase C) Completion: February 2016
- Construction Start Date: May 2016
- Construction Complete: July 2017

PROGRAMS AND SERVICES:
This project will construct a 34,700 gsf facility. This instructional facility will serve Bell, Harlan, and Knox counties by providing a comprehensive mix of education, training, and economic development services in conjunction with technical certificates, diplomas, and degree programs of KCTCS. Two-year postsecondary programs will be delivered by Southeast KY CTC as a KCTCS institution, and through partnerships with EKU, LMU, UK, and UPike.

The existing Nursing Program currently located at the Pineville campus of Southeast Kentucky Community and Technical College will be re-located to the Education Alliance Center at the Middlesboro Campus. This building space will include primarily instructional space for wet laboratories, Nursing patient simulation equipment and beds, aviation simulator equipment, communication and broadcasting studio, and multi-purpose classroom space. The college in partnership with Eastern KY University will develop and implement an Aviation program. Space will be designated for a student learning and career center. Auditorium space will be included for large group instruction which will accommodate 300 seats, with the possibility for future expansion. A minimal amount of instructional support and office space will be included.

PROJECT STATUS:
The project is currently in Phase C design.
PROJECT: Construct 2D Arts School, Phase I

LOCATION: West KY CTC
Paducah School of Arts & Design, Paducah

ARCHITECT: Ross Tarrant Architects

GROSS SQUARE FOOTAGE: 33,700

NET SQUARE FOOTAGE: 22,600

BUDGET INFORMATION:
- Property Acquisition: 138,347
- Site Survey/Prep: 401,000
- Project Design & Other Administrative Expenses: 849,000
- Construction Cost Estimate: 7,000,000
- Equipment & Furniture Estimate: 911,653
- Project Contingencies: 700,000

Total Project Cost: $10,000,000

PROJECTED PROJECT SCHEDULE:
- Schematic Design (Phase A) Completion: July 2014
- Design Development (Phase B) Completion: July 2014
- Construction Documents (Phase C) Completion: August 2014
- Construction Start Date: September 2014
- Construction Complete: January 2016

PROGRAMS AND SERVICES:
Phase I is the construction of a 33,700 gsf facility to complete the art school offerings. The facility will house classroom, studio, office, and gallery space. Academic courses, as well as master workshops will be conducted in drawing, painting, digital photography and graphic design.

PROJECT STATUS:
The project is currently in construction.
A. Crisis Management Initiative

Preparedness – Emergency Operations Plan
KCTCS Office of Security and Crisis Management continues its mission to develop a disaster-resistant community and technical college system. Since the last update in December 2014, staff have completed two pilot programs at Gateway Community and Technical College and Henderson Community College. Gateway completed a tabletop exercise in early fall 2015 and will be continuing to test its plans during a Functional Exercise on November 20, 2015. Henderson completed a Tabletop Exercise in July 2015 and is working through the challenges identified during that exercise. The pilot programs Gateway and Henderson were intended to test the colleges’ implementation strategy of their respective Emergency Operations Plan. As a result of the two pilot programs, a planning strategy was developed that will facilitate the remaining 14 colleges’ work on establishing a comprehensive training and exercising plan in 2016.

Preparedness – Systemwide Campaign
In September 2015, the Office of Security and Crisis Management developed a Hazard Preparedness campaign. The goal of this campaign was to increase KCTCS Colleges’ awareness of the following:

- The most likely disasters that could happen in their respective communities.
- The actions and knowledge needed to be safe and mitigate damage.
- The steps to increase preparedness.
- The importance of participating in community resilience planning.

Clery Act Compliance
The Office of Security and Crisis Management continues to improve Clery Act compliance efforts across the System. During the 2015 calendar year, two sets of tools were provided to assist the colleges in developing Annual Security Reports (ASRs). The Clery Act requires colleges to disclose their policy and procedure statements in the ASR to provide communities with important information about crime reporting procedures, access to college facilities and grounds, and rules governing college security personnel. The ASR requires over 70 policy and procedure disclosures. The ASR is required to be distributed by October 1 each year.

The U.S. Department of Education (DOE) may fine each college $32,000 for a missing or inadequate policy statement. KCTCS Colleges without an ASR in calendar year 2013 were provided assistance to develop a report, including a formatting tool that walked staff through the required policy and procedure disclosures. For the colleges that had ASRs with missing or inadequate policy statements, a Corrective Action Plan was provided that included recommendations for improving the policy statements.
In 2014, nine KCTCS colleges distributed fully-compliant ASRs to their campus communities. As a result, KCTCS colleges reduced potential liabilities from DOE-sanctioned fines in the amount of $292,500. Throughout 2015, Security and Crisis Management staff continued to work to ensure similar cost avoidance at the other seven KCTCS Colleges and to ensure a secure and well-prepared System.

In 2015, all 16 colleges distributed fully-compliant ASRs to their campus communities, with 13 distributed by the due date of Oct. 1. The other three colleges submitted fully-compliant ASRs to their communities by Oct. 2. Security and Crisis Management will continue to work with the colleges to provide review and audit services and to support the compliance efforts.

**Violence Against Women Act – Campus Sexual Violence Elimination (SaVE) Act**

In March 2013, President Barak Obama reauthorized the Violence Against Women Act (VAWA). Included in this Act was the Campus Sexual Violence Elimination (SaVE) Act. The SaVE Act amends the federal Jeanne Clery Act, which requires all colleges to collect and report annual crime statistics to the campus community. The SaVE Act amendments:

- Require that incidents of domestic violence, dating violence, sexual assault, and stalking be disclosed in annual campus crime statistic reports.
- Clarify minimum standards for institutional disciplinary procedures covering domestic violence, dating violence, sexual assault, and stalking.
- Instruct colleges and universities to provide programming for students and employees addressing the issues of domestic violence, dating violence, sexual assault, and stalking. Education programs shall include: primary prevention and awareness for new students and employees, safe and positive options for bystander intervention, information on risk reduction, etc.
- Establish collaboration between the U.S. Departments of Justice, Education, and Health and Human Services to collect and disseminate best practices for preventing and responding to domestic violence, dating violence, sexual assault, and stalking.

Colleges and universities were expected to make a “good-faith effort” to comply with the preliminary federal regulations by October 1, 2014. Final regulations were published fall 2014.

KCTCS has made significant progress in complying with the preliminary Campus SaVE regulations. One example of compliance is a fall 2014 partnership with Everfi, a nationally recognized student wellness organization. The partnership is for a one-year free pilot program to deliver sexual assault awareness and prevention training to students and employees.

In July 2015, KCTCS agreed upon a 3-year partnership with CampusClarity to provide sexual assault awareness trainings to both students and employees. The CampusClarity partnership satisfies the compliance portion of the regulations and provides a comprehensive training on dealing with potential issues that pertain to sexual assault on campuses.
Title IX – Sexual Misconduct Policies
The Office of Security and Crisis Management has been partnering with KCTCS Legal Services to develop sexual misconduct policies and procedures that comply with new U.S. Department of Education guidelines. Work is in the final stages of the approval process. Once the sexual misconduct policies and procedures are approved, training will be provided for all KCTCS Title IX Coordinators.

In the interim, Title IX training and support to colleges continues. During the policy development process, Crisis Management and Legal Services staff have provided consultation to colleges receiving reports of domestic violence, dating violence, stalking, or sexual assault. For example, in February 2015 the KCTCS Office of Security and Crisis Management and KCTCS Legal Services provided training to the Title IX Coordinators representing the KCTCS colleges.

Campus Safety and Security Survey
In early November 2015, Security and Crisis Management staff worked alongside the Legal Services to create a survey that was sent out to KCTCS College Presidents. Due November 24, 2015, the purpose of the survey is to assess KCTCS Colleges’ services and protocols related to student mental health issues, along with safety and security. The impetus for collecting the information is three-fold:

1) Being responsive to comments received during KCTCS President Jay Box’s 2015 campus visits.
2) Recognizing the need to gather data to inform policies or protocols.
3) Responding to student deans’ communications to KCTCS Legal Services about student issues.

Kentucky Higher Education Emergency Management Association (KHEEMA) Board Election
In March of 2015, two members of KCTCS were elected to the KHEEMA Board of Directors. KCTCS representation on the KHEEMA Board provides KCTCS with insight and the ability to work collaboratively with other institutions across the state. KHEEMA was created June 2013 by a partnership formed between the KCTCS Office of Security and Crisis Management and the emergency (crisis) managers at Murray State University, University of Kentucky, University of Louisville, and Western Kentucky University. The association is an open-based forum for sharing best practices, planning, training, and developing policies in the field of emergency management and business continuity for institutions of higher education. The association also serves as a conduit between federal, state, and local emergency management partners and IHE emergency management professionals. The association is free and open to all IHEs and their partners in the state of Kentucky. KCTCS officials responsible for security and crisis management have provided significant support for the association. On October 16, 2014, the KCTCS System Office hosted the second meeting of the association. At the meeting, 32 institutions were represented, including 10 KCTCS colleges. The association will be a valuable information sharing network for colleges and universities across the Commonwealth.
Multi-Hazard Emergency Planning
In June of 2015, the KCTCS Office of Security and Crisis Management partnered with Kentucky Emergency Management to offer Federal Emergency Management Agency (FEMA) L363 Multi-Hazard Emergency Planning for Higher Education. The FEMA course is designed to be delivered to teams of campus personnel who are responsible for creating, reviewing, implementing, and exercising emergency operations plans (EOPs). The target audience for the course is people who have traditional response or strategic experience but who have minimal experience in emergency management planning. The three-day course is primarily interactive presentations coupled with numerous individual and group exercises. KCTCS had representatives from 6 colleges attend the training.
KCTCS Sustainability Definition and Focus

Consistent with the KCTCS Vision to be the nation’s premier community and technical college system, KCTCS is becoming a leader in practices, educational and workforce training opportunities, and community leadership related to sustainable development or sustainability. The most commonly accepted definition of sustainable development is found in the 1987 United Nations’ Our Common Future: Report of the World Commission on Environment and Development (also known as the Brundtland Report):

*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*

Sustainability is more than “being green.” Multifaceted, sustainability touches every area of an organization, including postsecondary institutions. Sustainable development supports the collaborative culture upon which KCTCS is built. Much of sustainability is based upon innovation, proactivity, and continuous quality improvement (CQI) concepts, especially gaining efficiencies without compromising quality effectiveness, all of which are key components of KCTCS success and culture. At KCTCS, sustainable development is about partnerships, collaborations, communities, responsible stewardship, and thinking creatively to balance social, economic, and environmental resources to transform the KCTCS community and the communities it serves with an eye toward future generations.

Facilitating cultural change to enhance the well-being of people, sustainability includes improving efficiencies and effectiveness in a socially equitable manner. Implementing sustainable practices demonstrates responsible stewardship of social, economic, and environmental resources. An all-encompassing initiative to achieve the KCTCS Mission and Vision to transform the lives and communities of Kentuckians and equipping them with the knowledge and tools needed to live and work in a global, knowledge-based economy, KCTCS sustainability focus is on being “Green+.”

![Diagram of Sustainable Development](http://en.wikipedia.org/wiki/File:Sustainable_development.svg)
**KCTCS Sustainability Vision**

Consistent with the *KCTCS Vision* to be the nation’s premier community and technical college system, be a leader in practices, educational and workforce training opportunities, and community engagement related to sustainable development or sustainability.

**KCTCS Sustainability Aim**

Demonstrate responsible stewardship and facilitate cultural change to:

- Enhance the well-being of people and KCTCS in a socially equitable manner.
- Focus on being Green Plus by balancing the social, environmental, and economic criteria (see diagram on preceding page) of the sustainability triple bottom line.
- Obtain sustainable communities inside, across, and outside of KCTCS.

**KCTCS Sustainability Strategy**

- Promote sustainable communities inside and outside of KCTCS, using an all-encompassing, no-silo approach, through adoption of sustainable development goals for each KCTCS focus area.
- Communicate KCTCS commitment to sustainability through adoption of sustainability performance metrics that facilitate benchmarking with peer institutions in other states and that are found in national, higher education sustainability assessments, including (but not limited to) the American Association for Sustainability in Higher Education’s (AASHE) Sustainability Tracking, Assessment and Rating System™ (STARS). In addition to (not a substitution for) the AASHE STARS metrics (as updated), other assessment metrics also may be used to communicate sustainable development achievements.

**Sustainability Objectives**

- Facilitate cultural change to balance the social, environmental, and economic criteria of the sustainability triple bottom line across KCTCS.
- Enhance the efficiency and effectiveness of KCTCS, its partnerships, and collaborations to spur sustainable economic development and a green economy.
- Embrace and practice social justice across KCTCS.
- Make KCTCS a model of sustainability in the Commonwealth, focusing on efficiency and effectiveness opportunities.
- Protect Kentucky’s natural resources and environment, providing ‘green’ leadership to preserve and enhance Kentucky’s unique ecosystem, including tracking the KCTCS carbon footprint and greenhouse gas emissions (including emissions from electricity, heating, commuting, and air travel).
- Establish energy management strategies to stabilize and reduce long-term energy costs.
- Provide leadership, service, and support to build upon the sustainable foundation already in place across KCTCS.
- Benchmark sustainability progress using nationally recognized sustainability measures for higher education.
**KCTCS Sustainability Focus Areas**

The KCTCS Green + Sustainability Initiative moves KCTCS toward sustainability by including specific focus area initiatives related to KCTCS sustainability priorities, the Association for the Advancement of Sustainability in Higher Education’s (AASHE) Sustainability Tracking Assessment and Rating System™ (STARS), and the American Association of Community Colleges’ (AACC) Green Mission Statement. KCTCS-specific focus areas include:

- Administration.
- Outreach and Service.
- Curriculum/Workforce Development.
- American Association of Community Colleges (AACC) Green Mission.
- Student Opportunities.
- Faculty and Staff Development.
- Operations.

**KCTCS Green+ Sustainability Highlights**

For the December 4, 2015, KCTCS Board of Regents update, KCTCS Colleges were asked to provide a general sustainability update for the timeframe of May 1, 2015, to October 23, 2015. The colleges’ updates follow.

**Ashland Community and Technical College**

*Faculty and Staff Engagement at All College Meeting Sustainability Discussion*

Ashland Community and Technical College included a discussion of the college’s sustainability initiatives during its August 2015 collegewide meeting. Faculty, staff, and administrators met and discussed current and future green projects and initiatives for the college. Comments were recorded and shared with the sustainability committee.

*Grant Funding from Appalachian Electric and Power (AEP)*

Ashland Community and Technical College’s Electrical Technology Program received a $16,000 grant from AEP to purchase a wind/solar energy training station. The initiative increases student opportunities and social engagement with the community, serving as a model of green practices that can be employed at the individual level.

*Sustainability Center Development*

An ongoing initiative at Ashland Community and Technical College’s Technology Drive Campus is the development of a Sustainability Center. Ground work began fall 2015 to install:

- 2 wind turbines;
- 4 solar panels;
- 1 battery house; and
- 1 small hoop-style greenhouse (powered by renewable energy).

The center will serve as a training laboratory for many courses and programs, including ecology, electrical technology, industrial maintenance, welding, lineman, and culinary arts.
**Water Stewardship Incorporated into Biology Curriculum**

Due to safety concerns stemming from the presence of toxic blue-green algal blooms in Grayson Lake (also concurrently occurring in the nearby Ohio River), the annual Grayson Lake Cleanup organized by the college faculty and staff was cancelled. The opportunity provided a ‘teachable moment’ for biology and microbiology courses to raise student awareness on the impact of water contamination.

**Nature Trail Development Collaboration to Reduce Maintenance Costs**

Ashland Community and Technical College students in the Science Club will partner with the college’s Facilities Department to reopen a nature trail on the College Drive Campus. Originally constructed in the 1980s by students in classes taught by Professor Emeritus Charles Howes, the trail had lately fallen into disrepair. Science Club students discovered the trail during their fall break project of cleaning up the Long Fork Creek on campus. Students and club sponsors cleaned up the walking trail located behind the Goodpaster Building on the College Drive Campus. The group of students, faculty and staff picked up trash, raked leaves, cleared out weeds, chain-sawed several large logs, and repaired the trail. Adopted as a new campus service project, the next steps in the trail project include repairing railing, adding water boards for erosion control, and adding some gravel to the steps. The wooded area has been undergoing active management for invasive plant removal and improvement of wildlife habitat, with the ultimate goal of reducing maintenance costs by relying on ecological stability.

**Student or Community Engagement Opportunities**

Ashland Community and Technical College Students met at the College Drive Campus over fall break to remove litter from the stream that flows through the campus and from the woodlot on the campus. Future projects identified for the 2015-16 Academic year include the perennial clean-up events at nearby Grayson Lake in addition to a spring 2016 tree seedling giveaway in downtown Ashland.

**Cost Savings or Cost Avoidance Sustainability Initiatives**

Ashland Community and Technical College is reducing its environmental and operations and maintenance costs through the following sustainability-related initiatives:

- Installation of new, low-energy LED security cameras that are being networked as part of student curricula.
- Phased transition to more efficient light bulbs and electronic ballasts at the Robert’s Drive Campus.
- Electronic customization of paper forms (for example, travel reimbursements, timesheets).
- Grassland maintenance at the Technology Drive Campus contracted to a farmer who will amend and improve the soil as part of the contract agreement.
**Big Sandy Community and Technical College**

*Recycling Initiative*
Big Sandy Community and Technical College has enhanced its recycling program. More than 200 trash containers for recyclable items were purchased and placed across the college’s campuses. Every office and copier location on four campuses now has two receptacles, one for trash and one for recyclable paper and plastic. Containers used for recyclable materials are bright green with the universal recycling symbol. Collected daily, the recyclable waste is transported to a large commercial bin and picked up weekly by the solid waste vendors. The recyclable material is then separated by the waste vendor and processed. In addition, cardboard is collected and deposited into a vendor provided container for vendor processing and recycling.

**Bluegrass Community and Technical College**

*Ninth Annual Peace Fair*
Bluegrass Community and Technical College (BCTC) Cooper Campus cohosted the 9th Lexington Peace Fair on Sunday, September 20, 2015, on the lawn of Cooper Campus. Held from 1:00 p.m. to 6:30 p.m., the Peace Fair was free and open to the public. The Peace Fair was co-hosted by the Central Kentucky Council for Peace and Justice and the Community Montessori/Montessori Middle School of Kentucky. International, environmental, social justice, and fair trade organizations were present at the fair, which also featured a lineup of musical and dance performances.

*Grant from Lexington Fayette Urban County Government (LFUCG)*
Bluegrass Community and Technical College received a sustainability grant from LFUCG. With the grant funding, the college will enhance interpretive trail at the BCTC Newtown Campus. Students have participated in the interpretive trail improvements, assisting with the path layout for the trail. In addition, throughout the remainder of the year, BCTC students will tend, prepare the soil, and plant additional plants. BCTC faculty and staff planted fruit trees and Kentucky Coffee trees. A planting of Newtown Pippin heritage apple trees is planned for fall 2015.

*Gift from Central Bank and Trust Co.*
In June 2015, Bluegrass Community and Technical College received a gift from Central Bank and Trust Co. The leadership gift supports the BCTC BuildSmart Initiative to build a second classroom building that will provide state-of-the-art classroom and lab space focused on science education. The Newtown Campus is a cornerstone of the Newtown Corridor and provides a significant step in the transformation of this part of Lexington and the surrounding neighborhoods.

**Elizabethtown Community and Technical College**

*Sustainability Workshop at Faculty Convocation*
Elizabethtown Community and Technical College (ECTC) hosted a workshop on sustainability during a break out session at the August 12, 2015, faculty convocation. Members of the college’s Sustainability Team presented a short informational session on sustainability, what it is and how it is reflected on KCTCS campuses. After the presentation, discussion was opened up and ideas shared regarding how faculty could incorporate sustainability into their courses and other ways the campus could be more sustainable. A comprehensive list of the ideas generated during the discussion was shared campuswide. One outcome was a common sustainability themed reading that will begin with faculty and staff late fall 2015 and will be used with students for the 2016 spring semester.
Constitution Day Initiative
On Thursday, September 17, 2015, Elizabethtown Community and Technical College hosted a Constitution Day event featuring 9th District Judge Kimberly Winkenhofer Shumate and Law Enforcement Officer Bryce Shumate. The free public event offered a discussion of “current issues in search and seizure and the societal tensions surrounding the 4th amendment.”

Engineering Day
Elizabethtown Community and Technical College received sponsorships from Louisville Gas & Electric Company and Kentucky Utilities for the college’s Engineering Day held September 24, 2015. Engineering Day, established in 2009, stimulates interest in engineering education and careers for students in area high schools. Students from seven different high schools participated in interactive demonstrations, heard from engineering professionals, and learned about educational opportunities at ECTC that prepare them for engineering careers. The partnership between ECTC and LG&E and KU began earlier in 2015 with the Craft Worker Internship Program, which provides technical students with tuition assistance, work experience, and jobs in a variety of career fields.

Gateway Community and Technical College

Grant Received from Keep America Beautiful and the Coca Cola Foundation to Support Operation Goals of Reducing, Reusing, and Recycling
In July 2015, Gateway Community and Technical College (GCTC) was one of 37 colleges and universities across the United States to receive a grant for recycling bins. Twenty recycling bins designed specifically for placement at each campus were delivered as part of a national recycling bin grant made possible by Keep America Beautiful and The Coca-Cola Foundation. The bins enhance the college’s existing recycling program by providing additional convenient locations for students, employees, and visitors to recycle responsibly. The bins not only promote recycling on campus, but educate and encourage the college community to do the same at home and elsewhere. To date, Gateway has experienced a 20 percent increase in the amount of recyclables collected during the same period in 2014.

Energy Credit Totaling $10,000 Earned for Energy Management
Gateway Community and Technical College’s PowerShare agreement with Duke Energy provided the college with a $10,000 credit, along with a $0.10 credit per kWh for energy curtailment during a voluntary load reduction on September 1, 2015. The college’s goal was set at 665kW, which it exceeded by 330kW.

Outreach and Service – Local School District Urban Farming Initiative
From spring 2015 to fall 2015, Gateway Community and Technical College’s Sustainability Team Co-Chair Justin Ervin collaborated with Keep Covington Beautiful and Latonia Elementary to develop and manage an urban farm at the Latonia Campus. The development included building raised beds, planting, completing an irrigation system, and completing installation of a hoop house. Students participating in a business program sold the vegetables to local businesses and at school farmer’s market events. The initiative is a follow up report to the college’s October 31, 2014, Board of Regents report about a $20K grant awarded by Lowes and Keep America Beautiful to support development of the program.
**Tree Planting Celebrating Manufacturing Partnership**

Gateway Community and Technical College celebrated Linamar Corporation’s 50th anniversary and the college’s 10-year partnership with the company’s Eagle Manufacturing, LLC division with the planting of four trees donated by Linamar to commemorate the occasion. Gateway CTC and Eagle Manufacturing/Linamar employees and apprentices gathered on September 23, 2015, at the college’s Boone Campus for the planting and to celebrate the corporate anniversary and partnership with the college. The 10-year partnership has grown to include apprenticeships, workforce education, and training. The planting of trees represents the growth and stability that partnerships provide to the community. Gateway Community and Technical College is appreciative of the trees and the beautification they provide to the campus, especially after the loss of several trees from the ash borer infestation.

**Hazard Community and Technical College**

**Adoption of Local Sustainability Statement**

Hazard Community and Technical College (HCTC) adopted a revised sustainability statement that is modeled on the American Association of Community College’s (AACC) Green Mission Statement. The college’s sustainability statement indicates that “HCTC, by transforming its curricula, workforce collaboration, and campus operations, will generate the skills, values, and behaviors that will prepare society and students in a thriving green and sustainable Economy.” The AACC Green Mission statement is guiding the design of the “Smart Energy Training Center” planning process to ensure students are exposed to real world skills.

**Smart Energy Training Center Funded by an Appalachian Regional Commission Grant**

Hazard Community and Technical College completed the Smart Energy Training Center September 8, 2015. The purpose of the center is the training of green/smart energy technology, allowing for the incorporation of green smart/energy into existing HVAC and electrical technology curricula and continuing education programming. Used to teach multi-crafts at the same time, while incorporating green/smart energy technology into the curriculum, the programs served by the Smart Energy Training Center include Air Conditioning Technology, Computer-Aided Drafting and Design/Surveying, Electrical Technology, Information Technology, and Welding Technology. At the center, instructional labs and classrooms will provide hands-on learning opportunities for HVAC, electrical, plumbing, general carpentry classes, and automated controls systems. One of the first training centers of this type in Eastern Kentucky, the 1,200 square foot center includes solar panels, home automation capabilities, a large wiring closet, emergency power hook-up capabilities, a geo-thermal training unit, energy audit testing equipment, heat pump training units, air conditioning training units, grid tie-in capability, wood and aluminum framing, PCL units, earthquake building specifications and a conference/training area with smart classroom technology. Funding for the Smart Energy Training Center came from an Appalachian Regional Commission Grant.

**Shortened Summer Work Schedule**

To promote energy conservation and awareness about the need to better manage energy resources, HCTC implemented a modified summer work schedule at all campus locations, except the Hazard Campus.
**Accelerating Opportunities Initiative**
A major hurdle to achieve sustainability is the alleviation of poverty. It is the goal of Accelerating Opportunities (AO) initiative to increase the number of qualified workers in communities, which is especially important for displaced coal miners in the area that are facing poverty and economic hardship. The Workforce Solutions unit at Hazard Community and Technical College (HCTC) is receiving dollars from the Kentucky Community and Technical College System (KCTCS) through a program called Accelerating Opportunities (AO). The AO program assists eligible persons to obtain a college credit certificate quickly in order to increase the number of more qualified workers in the community. Students enrolled in AO identified career pathways may enroll in those courses geared toward the job-specific pathway while working on their developmental educational needs or while working toward GED completion.

**Twenty-First Century Education Enterprise (TCEE) Faculty Workshop**
Hazard Community and Technical College’s University Center of the Mountains hosted “Teachers in the Classroom for the 21st Century Education Enterprise” sessions through Morehead State University’s TCEE. The 7-day workshop targeted for middle and high school teachers in the region included a workshop focusing on creating a sustainable classroom and teaching sustainability-related topics. Workshops also focused on project based learning techniques, the use of technology in the classroom, professional development, and educational leadership to improve teacher effectiveness and student engagement.

**Rural Child Poverty Nutrition Center Grant Collaboration with Hindman Settlement School and Morehead State University**
Hazard Community and Technical College is working with Morehead State University and the Hindman Settlement School in the implementation of a grant through the Rural Child Poverty Nutrition Center to increase the participation rates in USDA Food and Nutrition Services programs by families in Knott County, Kentucky. HCTC will provide guidance, training, and mentoring to the Hindman Settlement School in their efforts to collect data on child nutrition in Knott County and its work toward becoming a SFSP and CACFP sponsor.

**HopeLine Project with Verizon**
Hazard Community and Technical College is participating in the HopeLine Project, which collects no longer used wireless phones, batteries, chargers, and accessories and turns them into cash grants and other support for domestic violence awareness and prevention organizations. Phones are refurbished and recycled in an environmentally safe way.

**Employee and Student Engagement in America Recycles Week**
During the week of November 9-15, 2015, HCTC employees and students will be encouraged to visit the America Recycles website and take the “I Recycle” pledge. In addition, the Student Ambassadors Club and Student Activity Club on the Knott County Campus are sponsoring a week long recycle event during America Recycle Week. Both clubs have encouraged other students to use the recycling bins provided on all our campuses.

**Knott County Student Engagement Club**
Hazard Community and Technical College Knott County Campus has created a Student Engagement Club, which has a huge emphasis on environmental preservation and community sustainability projects.
**Lineman Training Program with Emphasis on Displaced Mine Workers**
Hazard Community and Technical College has added the Lineman Training Program to the Workforce Solutions Department. The objective of the Lineman Training Program is to provide an opportunity for students to embark on a meaningful and rewarding career in the electrical line work industry. Upon completion of the class, students are prepared to enter and be successful in the Line Utility Industry. The program provides opportunities for individuals, including displaced mine workers, to retool and enter a high wage high demand job.

**Partnership with Berea College’s Grow Appalachia**
Hazard Community and Technical College School of Craft formed a partnership with the Grow Appalachia program at Berea College to produce gardening tools. The School of Craft will be producing gardening tools through metal working that will supplement the production and harvesting of food.

**Litter Cleanup and Campus Beautification**
The HCTC School of Craft partnered with local businesses to complete a litter cleanup project in Knott County.

**Maintenance and Operations (M&O) Initiatives**
Hazard Community and Technical College Maintenance and Operations has engaged in several sustainability-related initiative since the June 2015 Board of Regents meeting. Some of the initiatives are highlighted below.

- **Tobacco Free.** On July 1, 2015, Hazard Community and Technical College became a tobacco free campus.
- **Training.** M&O staff are completing monthly trainings to improve sustainability and improve energy efficiency. Staff also are receiving hands-on, advanced computer training to allow more electronic communications and less hand written forms, reducing the need of paper and less impact on the environment.
- **Green Cleaning.** The college is purchasing environmental friendly cleaning supplies. “Beyond Green Cleaning Solution” is used by the college’s M&O staff. The product is nontoxic and multipurpose, providing a green alternative to harsh nonenvironmentally friendly cleaning agents.
- **Gardens and Trees.** HCTCS has planted native trees on each campus. In addition, installation of new planters will allow students groups the opportunity to have their own garden space.
- **Cooking Oil Recycling.** HCTC has identified a business partner to dispose of used cooking oils from our food services department. The cooking oil is now processed through another vendor to make motor fuel.
- **Repurposing File Cabinets.** HCTC donates surplus filing cabinets to local schools, fire departments, and businesses to prevent disposal in landfills.
Henderson Community College

**Outreach and Service**
Henderson Community College (HCC) demonstrates an ongoing commitment to sustainability with initiatives in several focus areas. As part of its commitment to Outreach and Service, HCC hosted two Career Craze Camps for students in grades six through eight. The camps highlighted careers in health care and manufacturing. HCC also offered a free Summer Academic Enrichment Program for minority students in middle school.

**Grant from Keep America Beautiful and the Coca Cola Foundation**
Henderson Community College was awarded a grant from Keep America Beautiful and the Coca Cola Foundation. The college received ten bottle-shaped recycling bins that were placed across the college.

**Curriculum and Workforce Development**
Supporting the focus area Curriculum and Workforce Development, HCC, in partnership with West Kentucky Community and Technical College, added two new technical programs in Logistics and Operations and Marine Technology. For these online programs, students will take general education courses through HCC, and WKCTC will award the degrees.

**Student Opportunities**
With a focus on Student Opportunities, students in the Henderson Association of Nursing Students (HANS) provided service by sorting and packaging surplus medical supplies for Supplies Overseas (SOS). The supplies were shipped to impoverished countries. SOS also donated supplies to the HCC nursing lab. HCC hosted its first annual Healthy on the Hill event. During this health fair, nursing students, dental students, and community organizations offered cholesterol and blood pressure checks, depression screening, and information on other health topics. While the target audience of the health fair was students taking course FYE 105, the event was open to all students, faculty, and staff. Another student opportunity, hosted by the Diversity Learning Community and the Riverbend Review, was the Coffeehouse presentation of novelist Margaret McMullan, visual artist Sean Wallace, and musician Jake Tapley. The Coffeehouse also featured open mic time.

**Faculty and Staff Development**
Supporting Faculty and Staff Development, the Henderson Community College Foundation is sponsoring “Top of the Hill Toastmasters.” Participants in Top of the Hill Toastmasters meet regularly and gain confidence speaking in front of an audience.

**Operations**
Henderson Community College has restricted use of personal space heaters and refrigerators. The HCC Lean Enterprise Committee is developing contests and training to decrease electrical consumption across the college.
Hopkinsville Community College

Student Opportunities
Hopkinsville Community College launched a Student Green Club. Student members have met, elected leadership, and agreed on the mission of the club. The mission of the Student Green Club focuses on community education, sustainability projects, and collaboration with faculty and staff to assist with new initiatives.

Mission Statement Revision
Hopkinsville Community Colleges is exploring explicitly including sustainability in its revised mission statement (fall 2016). Already, one of the college’s value statements mentions commitment to sustainability.

Jefferson Community and Technical College

Partnership for a Green City
Jefferson Community and Technical College’s (JCTC) students, faculty, and staff continue to champion sustainability, focusing on the Partnership for a Green City to continue to meet sustainability goals. This partnership provides resources and assistance through other tax payer based entities by offering data, research, and student and people power to accomplish tasks.

Utility Bill Analysis
During spring 2015, Jefferson Community and Technical College requested assistance to better understand/read the college’s energy bills, understand the rate structure used by its electrical utility (Louisville Gas and Electric or “LG&E” and Kentucky Utilities or “KU”) providers and demand charges, and to explore means to reduce energy costs (such as, ensuring that the college is receiving the best rate and that all accounts are truly active as well as identify operational parameters changes to obtain lower rates). The analysis resulted in a deeper knowledge of the college’s utility bills and opportunities. From the utility analysis, which based on 2014 utility charges, the following opportunities were identified:

- JCTC has six different electrical rate structures, with two locations qualifying for Time- of-Day rates.
- Two properties were connected for electricity but did not use any electricity over the last year.
- One-third of the college’s electrical cost is from Demand Charges. Demand charges are based on the highest energy use during any 15 minute period. Elevated energy use (kW) can increase demand charge rates for 11 months.
- Significant increases are noted for many of the buildings, even when the temperature difference is minimal.
- The Power Factor (PF) varies between 88-92 percent. In an electric power system, a load with a low power factor draws more current than a load with a high power factor for the same amount of useful power transferred. An option to increase the Power Factor is to install capacitors to bring the PF closer to 100 percent, which will improve efficiency and reduce electrical load demand.
In spring 2015, the college held a workshop designed by the Kentucky Pollution Prevention Center (KPPC) to begin addressing issues identified during the utility bill analysis. KPPC is housed in the Speed School of Engineering at the University of Louisville. As a result of the spring workshop, the college created an Energy Audit Team, which conducted an energy audit at the Shelby Campus on August 4, 2015. Fifteen individuals from various departments and entities participated in the audit and audit training. Data gathered is being analyzed by engineering faculty and grad students at the University of Louisville. A report is expected in the next 2-3 months.

The intent is to take the knowledge gained from the Shelby Campus and apply it to the others. Jefferson CTC staff is monitoring utility consumption, creating a marketing campaign focused on turning off the lights and reporting on savings. The utility budget at Jefferson is roughly $2 million dollars, a 10 percent decrease in utilities results in a $20,000.00 savings.

Madisonville Community College

Silver Rating on the International Sustainability Assessment
Madisonville Community College received a Silver Rating on the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking Assessment Rating System (STARS). STARS was developed by AASHE in collaboration with 14 postsecondary education organizations and is comprised of approximately 70 sustainability metrics leading to improved environmental, social, and economic performance. STARS attempts to translate the broad and inclusive view of sustainability to measureable objectives at the campus level, enabling meaningful comparisons over time and across institutions using a common set of measurements divided into the following categories: 1) Academics (AC), 2) Engagement (EN), 3) Operations (OP), 4) Planning and Administration (PA), and 5) Innovation.

National Recognition for Sustainability Planning
Madisonville Community College was recognized in the 2015 Sustainable Campus Index published by the Association for the Advancement of Sustainability in Higher Education. The publication is a STARS annual review that recognizes top-performing institutions in each of the 17 STARS subcategories. Madisonville Community College was identified as a top performer in the Coordination and Planning section. The Coordination and Planning subcategory recognizes institutions that are dedicating resources to sustainability coordination, developing plans to move toward sustainability, and engaging the campus community in governance. Forty-three institutions achieved 100 percent of points earned in this subcategory. Results suggest that enrollment size may be a factor in how well institutions can dedicate resources to sustainability coordination. Top performers were determined based on percentage of points earned within a subcategory and adherence to credit criteria. The index is available at https://stars.aashe.org/pages/about/2015-campus-sustainability-report.html

Energy Savings Performance Contract
Madisonville Community College began a $3.2M “Energy Management” project, anticipating $265,000 in annual savings upon completion. The project concentrates on five major Energy Conservation Measures (ECM’s). Lighting will produce the major savings of $82,000 annually plus cost avoidance of $20,000 for a total of $102,000 savings per year. Mechanical improvements in boilers, piping, UV lighting, and fluid coolers will produce the next major savings over $70,000 annually. Control improvements will provide additional $73,000 in savings. Building Envelope improvements and Resource Management will complete the total guaranteed savings of $265,000.
Maysville Community and Technical College

Rowan Technical Campus LEED Certification
Maysville Community and Technical College is in the planning stage for building the Rowan Technical Campus in Morehead, Kentucky. The building is on target to meet or exceed minimum Leadership Engineering & Environmental Design (LEED) requirements to achieve a Silver Level Certification. LEED is a green building certification program that recognizes best-in-class building strategies and practices. Certified buildings save money and resources and have a positive impact on the health of occupants, while promoting renewable, clean energy. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification.

Mulberry Community Gardens Hosts Preschool and Kindergarten Students
Maysville Community and Technical College Mulberry Community Gardens is a partnership with the City of Maysville, the library, and the college. Maysville CTC faculty and staff sponsor the gardens. Everything in the garden is recycled or repurposed. The stones that line the garden beds were once used at the Mason County Detention Center and the MCTC Culinary School students take debris from their coursework to the garden and compost it. Another recycled item at the garden is the rain water, which is collected in a 50-gallon barrel and used for the plants.

In May, the college hosted students from the Maysville Nativity Montessori School at the Mulberry Community Gardens. The preschool and kindergarten children sat along the rock walls in the garden and enjoyed lunch made from vegetables grown in the community garden. Some of the children assisted with weeding and planting the garden in spring 2015. Maysville CTC Faculty Carrie Taylor, who runs the horticulture program at the college, talked about the importance of the garden. The children pulled peppers from the plants to take home with them. In addition to the peppers, the garden also has other vegetables and fruit. The produce is donated to places like the food pantry and the Women's Crisis Center.

Owensboro Community and Technical College

Nursing Students Volunteer and Get Additional Classroom Materials
Owensboro Community and Technical College’s (OCTC) Nursing Faculty and Simulation Specialist took nursing students on a road trip to volunteer with Supplies Over Seas (SOS). The third semester nursing students traveled to Louisville for the third semester in a row to help with SOS, a proud to partner with Owensboro Health. SOS supports medical education. When a nursing instructor brings students to SOS to volunteer, they are allowed to take applicable materials, unable to be used in the field, back to their classroom. The exchange is a tremendous help on diminishing educational budgets. In addition, the exchange allows nursing students more opportunity to practice with real materials before graduation. The OCTC group selected 402 pounds of expired materials from SOS to take back to the classroom.

Continuing Outreach from the NSF Preparing Technicians for Advanced Transportation Fuels grant
Faculty and staff from OCTC attended 50 events from May 19, 2014 to June 30, 2015 promoting alternative fuels. The events included high school football games, middle school clubs, and two NASCAR Races. Additionally, two OCTC faculty presented at the NACAT conference in Joliet, Illinois working with American Ethanol to present the automotive program in Alternative Fuels.
Kenergy Rebate
It pays to be energy smart! Owensboro Community and Technical College received a rebate check from Kenergy for over $78,000. The check was presented by Kyle Heavin from Kenergy to Dr. Scott Williams, OCTC President; Ms. Sarah Price, OCTC Vice President of Business Affairs; and Mr. Kenny Moxley, OCTC Maintenance and Operations Supervisor. The rebate was incurred by implementing the energy savings group project, primarily the lighting retrofit to LED. The rebate reflects only the portion of the project that has been completed. To date, the OCTC rebate is the largest rebate check issued by Kenergy. The lighting component is just one of fifteen separate energy conservation measures, (ECMs) that are incorporated as part of a Kentucky Guaranteed Performance Contract, Phase II project. Owensboro Community and Technical College, Madisonville Community College, and West Kentucky Community and Technical College are the three colleges involved in the project.

Somerset Community College

Grant from Personal Responsibility in a Desirable Environment (PRIDE)
Somerset Community College received a $500 PRIDE Grant. The grant funding will be used to further environmental education for the college’s students and their communities. Specifically, the will support initiatives for Somerset Community College’s Annual Earth Day event in 2016. •

PRIDE Clean Sweep
Somerset Community College students, faculty, and staff participated in the Personal Responsibility in a Desirable Environment (PRIDE) Clean Sweep on May 13, 2015. The Clean Sweep is an annual event open to local individuals, schools, businesses, and other organizations. Volunteers participating in the Clean Sweep picked up litter along US 27 and other roads in the community, such as the streets that surround the college.

Annual International Festival
Somerset Community College hosted its Annual International Festival at each of the college’s six campus locations (McCreary, Somerset, Clinton, Laurel, Russell, Casey) during the month of October, 2015. Highlights and exhibit topics included:

- A feature presentation by Jim Embry, community activist and founder of Sustainable Communities Network (Lexington, KY).
- Cultural presentations.
- International art, music, and dance.
- Sustainable agriculture.
- Global justice and fair trade.
- International foods prepared by Somerset Community College Culinary Arts students.
Southcentral Kentucky Community and Technical College

Outdoor Laboratory Herbs and Wildflower Initiatives
Southcentral Community and Technical College is committed to using the college as a living laboratory. The college’s Human Ecology and Culinary Faculty have teamed to plant an herbs for use in the culinary arts program. Planted in campus planters, the herbs have grown since spring 2015.

Southcentral Kentucky Community and Technical College Sustainability Committee and Ecology Class planted a test area of wildflowers spring 2015 on the college’s Main Campus. The purpose of the planting was threefold: 1) increase biodiversity, water retention and filtering by the long rooted flowers, 2) reduce the maintenance costs by reducing mowing and fertilizer use, and 3) campus beautification. The initiative has been a great success, the wildflower patch has been used with several classes during fall 2015 as an outdoor laboratory. The Sustainability Committee along with the Kentucky Department of Fish and Wildlife Resources are developing a plan to expand the initiative to larger spaces.

Courses Added Related to Environment and Sustainability
Southcentral Kentucky Community and Technical College has added two new courses related to the environment and sustainability. Geared toward students pursuing AA and AS degrees, the two added courses are:
- Biology 121 Human Ecology Lab is a discussion based course, covering differing sides on several sustainability issues.
- Biology 122 Conservation Biology focuses on the preservation of biodiversity, including ecosystems and endangered species.

In addition, the Computer Information Technology (CIT) 122 course has lessons that teach students responsible disposal of hazardous materials and E-waste.

Kentucky Department of Fish and Wildlife Presentation
Southcentral Kentucky Community and Technical College will host a presentation related to conservation. On November 4, 2015, Mr. Bill Lynch, Kentucky Department of Fish and Wildlife Resources, will visit the college and present on conservation issues in sustainability. The presentation will be open to all students, faculty, and staff.

Maintenance and Operations Sustainability Initiatives
- **Lanscaping.** Southcentral Kentucky Community and Technical College Maintenance and Operations has designated approximately seven acres of field to overgrow, which is in turn cut for hay (roughly three times per year) and then used for farm use. In addition, the flowers selected for landscaping attract essential pollinators such as butterflies and bees.
- **Resource Stewardship.** To reduce fuel usage and mileage on college vehicles, a 65 gallon gas buggy was purchased for the storage of gas at the Southcentral Kentucky Community and Technical College Transpark Campus. The stored gas is used for the Transpark Campus grounds maintenance. The reduced mileage and trips also reduce the carbon footprint of the college from the reduced travel.
- **Light Replacement.** As parking lights burn out or ballast go bad, the lighting heads are being replaced with LED lighting fixtures in order to reduce the electrical demand from the college’s lighting system. The LED lighting fixtures have a longer lifecycle and consume less energy, resulting in cost avoidance and reduced carbon footprint. In addition, fluorescent tubes (T8’s and T5’s) at the Transpark Campus have been replaced with ECO friendly tubes that are the most energy efficient tubes on the market to date. The new lighting reduces the overall electrical demand from the lighting system compared to what was originally installed.
• **Motion Sensors.** Southcentral Kentucky Community and Technical College has installed motion sensors in multiple class rooms and offices. The motion sensors are connected to the lighting so class rooms that lighting in unoccupied rooms will automatically shut off, reducing the overall electrical demand from lighting. Vending and soda machines also are connected to a motion sensor so when the area directly in front of the vending and soda machines are unoccupied the lighting on the machines turn off.

• **Recycling.** Recycling bins have been added to classrooms at the college’s Transpark Campus.

• **Green Cleaning Products.** The Southcentral Kentucky Community and Technical College Custodial Department is making an impact on sustainability. A large percentage of cleaning products are Green Seal, Ecological Certified, and DFE (Designed for the Environment). Specifically, the Custodial Department uses:
  
  o 100 percent recycled paper products.
  o Deb Foam Soap and Hand Sanitizer.
  o Daily Disinfectant Cleaner.
  o Green Earth Glass Cleaner.
  o Betco One Step pre-buffing mop solution.
  o Green Earth Peroxide Cleaner.

**Southeast Kentucky Community and Technical College**

**Shredding Event**
Southeast Kentucky Community and Technical College hosted a campuswide shredding event. The purpose of the shredding event was the secure shredding and destroying of documents. The Shred-A-Way company came to several campuses to shred the documents. All the shredded material is recycled.

**Recycling of Mulch/Landscaping Waste**
The Maintenance Department on the Southeast Kentucky Community and Technical College Middlesboro Campus is now recycling landscaping waste and mulch. An organic farmer regularly picks up the waste and uses it in his orchard.

**Best Management Practices**
Southeast Kentucky Community and Technical College Heavy Equipment Operations Faculty, Steve Greene, has been certified in the Best Management Practices in wastewater management. He incorporates BMP concepts into student projects.

**LED Lighting**
Southeast Kentucky Community and Technical College recently converted its Cumberland parking lot lights to LED. The LED bulbs have a 20-year life expectancy, compared to the bulbs being replaced 12-15 month lifecycle.

**STEM Visits**
The STEM programs (physics, chemistry, CAD, diesel technology) have been hosting groups of students from local elementary, middle, and high schools throughout the 2015 fall semester. The students are given information and demonstrations on various STEM programs that the college offers and include sustainability topics. The activities are designed to engage participants in thinking about future studies and careers in STEM fields.
West Kentucky Community and Technical College

Science Seminar – Energy Efficiency at Home, at Work, and at WKCTC
West Kentucky Community and Technical College (WKCTC) hosted a sustainability seminar regarding saving money while saving the planet. The September 2015 seminar was sponsored by two college faculty members. The seminar focused on sustainable development and meeting the “needs of present and future generations while substantially reducing poverty and conserving the planet’s life support systems.” The faculty held the seminar on Sustainability Day to discuss energy efficiency practices for everyone to consider. All faculty, staff and students were invited to the discussion as a means of continuing our efforts to promote sustainable practices and conserve energy for the planet.

Sierra Club on Campus - Explore, Enjoy and Protect Our Planet
The Great Rivers Group of the Sierra Club invited all members and potential friends to a dessert reception in Paducah in May at the college’s Emerging Technology Center. Attendees enjoyed refreshments and learned about Sierra Club opportunities and programs in the western Kentucky area. The Sierra Club’s motto is “Explore, Enjoy, and Protect our Planet.” During the program, the Sierra Club identified opportunities for those interested in the environment, hiking, exploring the region, or promoting clean energy and clean water policies. The program was open to faculty, staff, students, and the public.

Library Annual “Periodical Weeding”
The West Kentucky Community and Technical College Library staff conducted its annual “periodical weeding” in June. Numerous periodicals were made available to faculty, staff, and students free of charge to be repurposed or recycled in lieu of being disposed of as trash. The re-use of periodicals helps sustain the environment and reduces the carbon footprint for energy that would have been used for the destruction of materials.

Tobacco-Free
Beginning August 1, 2015, West Kentucky Community and Technical College became a tobacco-free institution. WKCTC is committed to the health and well-being of our students, faculty and staff and visitors to our campuses. The following link was provided to the campus community to learn more about the college's tobacco-free policy and procedures, as well as frequently asked questions and a list of available tobacco-free resources: http://westkentucky.kctcs.edu/en/About/TobaccoFreeCampus.aspx.

Fall Diversity and Inclusion Program Series
The Diversity and Inclusion Program Series continued fall 2015 with various events held on and off campus throughout the semester. Faculty, staff and students have been encouraged to attend the free events to help promote diversity and inclusion. The following link, which contains topics pertinent to specific subject areas and events to heighten awareness of diversity, was provided to all faculty staff, and students: http://issuu.com/jblythe0001/docs/diversityinclusion

Celebrating Our Similarities
Members of Phi Theta Kappa (PTK) Honor Society celebrated our cultural differences while celebrating our similarities with an international birthday party in the College Student Center. The event featured a birthday cake, “American-style,” as well as traditions from many of the countries that are represented by the WKCTC student and employee population.
Energy Saving Projects Started
Energy saving projects estimated to save $6.1 million dollars were initiated at the college during spring 2015. The projects are a part of a contract with the Commonwealth of Kentucky to promote energy savings across KCTCS. Projects at WKCTC include new boilers, new chillers, new HVAC controls, water efficient plumbing, tinted glass, equipment belt replacement, and new LED lighting internally and externally. The project will save energy and reduce utility costs. Energy savings will fund the project.

Science Seminar - Nutrition: The Good, the Bad, and the Ugly
With all the mixed messages on healthy foods and safe dieting, planning meals that are healthy and delicious can be confusing. Clinical Dietitian and Nutrition Manager, Renee Waggoner, presented a seminar on “Nutrition: The Good, the Bad, and the Ugly!” that was open to all faculty, staff and students at the College. Participants learned the critical role eating right plays in maintaining an active, healthy lifestyle.

POD EVENT: Alternative Approaches to Interactive Instructional Design
West Kentucky Community and Technical College hosted a faculty development opportunity via a webinar. The development is another manner in which faculty learned to expand their tool box of instructional methods without producing more paper or traveling to a conference, while at the same time reducing the expense of obtaining professional development.

Alpha Epsilon Beta Presented “Understanding Sexual Assault”
In October, Alpha Epsilon Beta, in collaboration with the Paducah Human Rights Commission, sponsored a presentation during the National Domestic Violence Awareness Month of October. The presentation was titled “Understanding Sexual Assault.” The 45-minute presentation was followed by a short questions and answer session. The event was approved for WKCTC professional development. The featured guest speaker was Lori Wells Brown, M.S., L.P.A. Ms. Brown is a graduate of Murray State University with a Master’s Degree in Clinical Psychology. She is a Licensed Psychological Associate who has been working in the trauma field for over 20 years. She currently serves as Executive Director and as a therapist at the Purchase Area Sexual Assault and Child Advocacy Center.

Ecofriendly Transportation for Students – August
Bus transportation, using a Paducah Area Transportation System Hybrid bus, is being offered during fall 2015 semester free of charge to West Kentucky Community and Technical College on-campus students. The bus will take students from the east end of the campus to the west end. The bus makes three stops for students on a continuing basis for six hours during the academic day. The use of energy saving transportation has helped increase the accessibility of classes for students, while at the same time providing conservation of resources for those who cannot afford transportation.
**Sustainable Development in Academics**
West Kentucky Community and Technical College Faculty member and Green Committee Chair Bobby Ann Lee interviewed Murray State University (MSU) faculty who are members of the MSU Sustainability Commission to analyze their experiences on implementing sustainable development at their campus. The interviews were part of a University of Kentucky course, EDL 770 Topical Seminar in Educational Leadership - Advanced Qualitative Methods.

**Project United**
Faculty and staff from WKCTC were involved in a community-wide day of service in September. More than 300 volunteers completed dozens of projects at non-profit agencies across Paducah and McCracken County. Projects included painting, landscaping, stocking pantries, office support, and assistance to those most in need.

**Energy Audit Demonstration Field Trip**
West Kentucky Community and Technical College Biology 120 students went on a field trip to the college’s Skilled Craft Training Center in Mayfield, Kentucky to participate in an energy audit demonstration for homes and to learn about solar and geothermal installation from Mark Westerfield, WKCTC HVAC Program Coordinator. The demonstration provided students the opportunity to see and learn hands-on how energy saving practices can be introduced into residential homes.

**Campus Recycling**
West Kentucky Community and Technical College entered a recycling collaboration with the City of Paducah for the pickup of recycled materials. The collaboration allows the college’s recycling initiative to continue. In spring 2015, the Greater Paducah Sustainability Project that WKCTC had been collaborating with for a number of years to provide pickup of recycled materials ceased operations.

**Donating Old Cell Phones to Help Prevent Domestic Violence**
October is National Domestic Violence Awareness Month, and West Kentucky Community and Technical College participated in Verizon’s HopeLine Project for domestic violence awareness and prevention. The HopeLine Project collects no-longer-used wireless phones, batteries, chargers and accessories in any condition, from any service provider, and turns them into cash grants and other support for domestic violence awareness and prevention organizations. Old phones and accessories were collected in various buildings in a HopeLine box on October 12 and 13, 2015. The project was a great success with over 100 phones and accessories donated.
KCTCS strives to ensure the effective and efficient use of resources, including physical infrastructure. The following Space Utilization Report provides information about the use of KCTCS instructional space, such as classroom and laboratories, at the college-level. The report also provides guidance and opportunity for development and enforcement of academic scheduling policies that outline usage guidelines for maximizing room hour usage, as well as seat fill optimums. In that regard, both the “room hour utilization” and “seat fill” percentages are included in the report. Room hour utilization is the percentage of a scheduling week that a room or group of rooms is in use, whereas the seat fill percentage is the average actual enrollment of classes scheduled in the room compared to the total number of available seats or stations in the room.

Background

In the American Association of Collegiate Registrars and Admissions Officers’ (AACRAO) *Managing Academic Space: A Guide for Higher Education Institutions*, it is noted that at the typical higher education campus around 43 percent of classes are under-filled. Overall, unfilled seats in unfilled classes are estimated at more than 30 percent of total available seats at the typical higher education campus, driving-up instructional and operational costs. At the same time, the guide indicates that an estimated 25 percent of classes are bottleneck classes that are over-filled, including gateway courses. Bottleneck classes create an access issue and barrier to completion because students are turned away from courses that are over-filled due to unavailable seats. Over-filled courses may also result in accumulation of unneeded credit hours and increased student costs. The guide further notes that higher education tends to offer more course sections (approximately 20 percent more) than necessary and that savings could be realized from maximizing the number of students in each section and matching demand with the number of sections offered.

Currently, external space utilization benchmarking is difficult because a comprehensive national database on higher education space utilization has yet to be developed. The U.S. Environmental Protection Agency’s “Portfolio Manager” has limited postsecondary education space information and includes only institutions self-selecting into the national database, which tracks participating entities’ energy and water efficiency. Recently, Ad Astra, a company specializing in higher education space utilization and student predictive analytics, has laid the groundwork for a postsecondary benchmarking system with its Higher Education Scheduling Index (HESI). Central to HESI, is the goal of supporting degree completion and affordability. On the following page, a list of terms and definitions used in the and HESI and throughout the fall 2015 space utilization review is provided.

### Terminology and Higher Education Industry Averages

#### Course Offerings

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>The actual enrollment of the section per term</td>
</tr>
<tr>
<td>Max Enrollment or Enrollment Capacity</td>
<td>The academic cap of the class section</td>
</tr>
<tr>
<td>Enrollment Efficiency or Enrollment Ratio</td>
<td>The total section(^3) enrollments compared to the total section capacity for all sections. (Enrollment divided by Max Enrollment). This measure is different from Seat Fill in that Seat Fill looks at the number of seats in the room. Enrollment Efficiency uses the section capacity as set by Academic Affairs.</td>
</tr>
<tr>
<td>Balanced Course Ratio</td>
<td>Percentage of courses that are balanced with student need (enrollment ratio between 70% and 95%)</td>
</tr>
<tr>
<td>Under-filled Course Ratio</td>
<td>Percentage of courses that are under-filled relative to student need (enrollment ratio less than 70%)</td>
</tr>
<tr>
<td>Overloaded Course Ratio</td>
<td>Percentage of courses that are over-filled relative to student need (enrollment ratio greater than 95%)</td>
</tr>
<tr>
<td>Addition Candidates</td>
<td>Percentage of total sections in a schedule that could potentially be added to meet demand</td>
</tr>
<tr>
<td>Efficiency Candidates</td>
<td>Percentage of total sections/courses in a schedule that could potentially be removed based on insufficient demand, including:</td>
</tr>
<tr>
<td></td>
<td>- Reduction Candidates: Sections that could potentially be removed from the schedule without negatively impacting student need.</td>
</tr>
<tr>
<td></td>
<td>- Elimination Candidates: courses that could potentially be removed from the schedule as long as graduation requirements are not compromised.</td>
</tr>
</tbody>
</table>


\(^3\) Section is a class offered for an academic course.
## Terminology and Higher Education Industry Averages

### Space Management

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Week Hours [Room Hours/Week]</td>
<td>The number of hours typically used in a scheduling week. [The sum of the average number of weekly hours scheduled in each room during each week of the selected term. Note: This is a weighted formula to adjust for class length. A class that meets from 8:00 a.m. to 9:00 a.m. on MWF for the entire specified term would get counted for three room hours (one hour for each day on Monday, Wednesday, and Friday). If that same class met for only half of the specified term, it would only be counted for one and one half hours of usage. Class hours are rounded up to the next quarter hour (a class meeting from 8:00 a.m. to 9:40 a.m. would get counted as 1.75 hours).]</td>
</tr>
<tr>
<td>Primetime Hours</td>
<td>The number of hours that have significantly concentrated usage within the Standard Week</td>
</tr>
<tr>
<td>Classroom Utilization Standard Week [Room Hour Utilization]</td>
<td>The percentage of Standard Week Hours that a typical classroom is in use [Average percentage of the standard weekly hours used by that room. (Room hours/Standard Week)]</td>
</tr>
<tr>
<td>Classroom Utilization Primetime</td>
<td>The percentage of hours in Primetime Hours that a typical classroom is in use</td>
</tr>
<tr>
<td>Prime Ratio</td>
<td>Percentage of hours scheduled during Primetime Hours (Primetime Room Hours divided by Total Room Hours)</td>
</tr>
<tr>
<td>Enrollment Seat Fill</td>
<td>The percentage of classroom seats in use by students at census (Enrollment divided by Room Capacity)</td>
</tr>
<tr>
<td>Capacity^[5] Seat Fill [or Seat Fill]</td>
<td>The percentage of seats intended for use (based on Enrollment Capacity) in a classroom when it is scheduled (Enrollment Capacity divided by Room Capacity) [Average seat fill percentage comparing the average enrollment or max enrollment of classes scheduled in the room to the capacity of the room. This calculation is based on actual enrollment.]</td>
</tr>
<tr>
<td>Off-Grid Scheduling</td>
<td>The percentage of scheduling using Non-Standard meeting patterns (those that are not an On-Grid/Standard meeting pattern) during Primetime</td>
</tr>
<tr>
<td>Off-Grid Waste</td>
<td>The percentage of capacity wasted by scheduling using Non-Standard meeting patterns (those that are not in an On-Grid/Standard meeting pattern) during Primetime</td>
</tr>
</tbody>
</table>

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5 Capacity is the number of student seats or workstations in the room.
Methodology and Sample Analysis

KCTCS tracks space usage via Astra Schedule, a commercial scheduling software package. Astra Schedule has customizable report generation capabilities. Report data were compiled at the college-level and then combined to determine the overall KCTCS instructional space usage, including Room Hour Utilization and Seat Fill percentages.

For the fall 2015 academic term, space usage patterns at each KCTCS campus were analyzed for efficiency. The analysis included usage within a 60-hour standard scheduling week and a 25-hour primetime scheduling week as follows:

- A standard scheduling week for a postsecondary campus varies from 45 to 90 hours per week (total opportunity to schedule). The standard scheduling week for KCTCS is 60 hours based on a 12-hour day and a five-day week (8:00 a.m. to 8:00 p.m., Monday through Friday).
- A KCTCS primetime scheduling week is 25 hours (9:00 a.m. to 2:00 p.m., Monday through Friday).

To analyze KCTCS’s ability to facilitate enrollment growth, some reports include potential capacity of classrooms using the assumption that class meeting patterns can be spread evenly throughout the standard or primetime scheduling weeks. Within each of the 60-hour standard and 25-hour primetime scheduling weeks, the target capacity is 80 percent usage instead of 100 percent. The 80 percent room utilization is considered an effective, reasonable, and sustainable capacity because maintaining utilization beyond 80 percent is difficult. While unlikely, it is possible to utilize space beyond the 80 percent threshold with an appropriate mix of classroom space, class sizes and meeting patterns.

A sample room analysis where four sections were held with varying enrollment follows.

<table>
<thead>
<tr>
<th>Room</th>
<th>Section</th>
<th>Enrollment/Enroll Cap</th>
<th>Workstations/Seats</th>
<th>Classroom usage</th>
<th>Seat fill</th>
<th>Enrollment efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room 1</td>
<td>1</td>
<td>18/20</td>
<td>45</td>
<td>3 hours</td>
<td>40%</td>
<td>90% (18/20)</td>
</tr>
<tr>
<td>Room 1</td>
<td>2</td>
<td>22/25</td>
<td>45</td>
<td>3 hours</td>
<td>49%</td>
<td>88% (22/25)</td>
</tr>
<tr>
<td>Room 1</td>
<td>3</td>
<td>16/25</td>
<td>45</td>
<td>3 hours</td>
<td>35%</td>
<td>64% (16/25)</td>
</tr>
<tr>
<td>Room 1</td>
<td>4</td>
<td>25/25</td>
<td>45</td>
<td>3 hours</td>
<td>55%</td>
<td>100% (25/25)</td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td>20%</td>
<td></td>
<td>45%</td>
<td>Avg (.4,.49,.35,.55)</td>
<td>85.5% Avg (.9,.88,.64,1)</td>
</tr>
</tbody>
</table>

The preceding sample table shows the space utilization and seat fill percentages. Other measures presented in the report are means to improve either seat fill or space utilization.
The Prime Time Percentage Report is a scheduling summary that details the average weekly mix of prime time and non-prime time room usage during the analysis period. A factor that affects space planning efficiency is the mix of class sections planned during prime time (9 a.m. to 2 p.m.) and non-prime time. High utilization rates during prime time hours result in scheduling difficulties for students due to class time overlaps and compression. Graph 1 provides a comparison between the number of sections offered during prime time (9 a.m. to 2 p.m.) and the number of sections offered outside of prime time. During fall 2015, the percentage of sections offered during prime time ranges from 31 percent at Maysville Community and Technical College to 53 percent at Southcentral Community and Technical College. In comparison, for the fall 2014 term the percentage of courses offered during prime time ranged between 29 percent at Maysville Community and Technical College and 52 percent at Owensboro Community and Technical College.

Graph 1: Prime Time and Non-Prime Time Sections Offered, Fall 2015

Where Building <> "WWW" and Begin Time <> "TBA" for Class time 7:59 AM and 8:00 PM and Where Location Ownership code = 1, 2, 3, 4, 5, or 9.
Enrollment Efficiency Summary Fall 2015

Enrollment efficiency is the measure of how many students enroll in a class as compared to the enrollment cap for the class. An enrollment efficiency of 85 percent is considered an achievable rate. Graph 2 compares enrollment efficiency for the fall 2014 and 2015 terms. For the fall 2015 term, enrollment efficiency ranges from 48 percent at Ashland Community and Technical College to 78 percent at Bluegrass Community and Technical College.

Graph 2: Enrollment Efficiency (Seat Fill %), Fall 2015

Sections counted where Building<>"WWW" And Building<>"TBA", and Begin Time > 7:59 AM and End Time < 4:30 PM, and Where Location Ownership code = 1, 2, 3, 4, 5, or 9, AND Crse Attr<>"TD" And Crse Attr<>"HSND" And Crse Attr<>"FR" And Crse Attr<>"DUAL" And Crse Attr<>"CR" And Crse Attr Not Like "WT*" And Crse Attr<>"VLI"
Space Utilization by Class Type:

Three room types are included in the review, including classrooms, laboratories, and nonstandard meeting rooms. Criteria for including a room in the space utilization by class type review include:

- A credit class section is held in the room.
- The building where the room is located is owned outright by KCTCS or KCTCS has a formal lease for the space.

Rooms excluded in the space utilization by class type review are rooms:

- Used at local school districts.
- Located at local businesses and industries.
- Classified as temporary occupancy rooms.

A. Classrooms

Graph 3 and Graph 4 indicate that the room hour utilization ranges from moderately low to moderate for KCTCS colleges. The utilization is based on the average percentage of use in that room within the standard 60 hour week (8 a.m. to 8 p.m. five days per week).

**Graph 3: Average Weekly Classroom Usage for Prime Time (9 AM - 2 PM), Fall 2015**
Contact Hours are used Where Building<>"WWW" And Building<>"TBA", and Begin Time Between 7:59 AM and 8:30 PM, and Where Location Ownership code = 1, 2, 3, 4, 5, or 9, and Room Type = Classroom*

B. Laboratories

Usually, general classroom space is more effectively utilized than either dedicated classroom space or single use lab space. On some campuses, space was designed to incorporate classrooms into the lab areas, making those rooms difficult to use for general scheduling purposes. Graph 5 and Graph 6 show the utilization of lab space.
Graph 5: Average Weekly Laboratory Usage for Prime Time (9 AM – 2 PM), Fall 2015

Graph 6: Average Weekly Laboratory Usage Based on a 60 Hour Week, Fall 2015

Contact Hours are used Where Building<>"WWW" And Building<>"TBA", and Begin Time Between 7:59 AM and 2:00 PM, and Where Location Ownership code = 1, 2, 3, 4, 5, or 9, and Room Type = Classroom*
C. Non-standard Meeting Pattern

Non-standard meeting room pattern usage occurs when a class section is scheduled at a non-standard time, creating timing overlaps in the schedule. Timing overlaps affect the students’ ability to schedule classes adjacent to non-standard times and room utilization by tying up a room for two standard class periods. Each college’s percent of sections offered on the standard meeting pattern reflects the compilation of the college’s respective campuses standard meeting patterns.

Graph 7: Percent of Sections Offered on the Standard Meeting Pattern, Fall 2015

Sections counted where Building<>"WWW" And Building<>"TBA", and Begin Time > 7:59 AM and End Time < 4:30 PM, and Where Location Ownership code = 1, 2, 3, 4, 5, or 9, AND Crse Attr<>"TD" And Crse Attr<>"HSND" And Crse Attr<>"FR" And Crse Attr<>"DUAL" And Crse Attr<>"CR" And Crse Attr Not Like "WT*" And Crse Attr<>"VLI"